

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference TIMK 8805WO	FOR FURTHER ACTION see Form PCT/ISA/220 as well as, where applicable, item 5 below.	
International application No. PCT/US2004/038250	International filing date (day/month/year) 10/11/2004	(Earliest) Priority Date (day/month/year) 10/11/2003
Applicant THE TIMKEN COMPANY		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 4 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the report

- a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ The international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

- b. ☐ With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, see Box No. I.

2. ☐ **Certain claims were found unsearchable** (See Box II).

3. ☐ **Unity of invention is lacking** (see Box III).

4. With regard to the title,

☒ the text is approved as submitted by the applicant.

☐ the text has been established by this Authority to read as follows:

5. With regard to the abstract,

☒ the text is approved as submitted by the applicant.

☐ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box No. IV. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. With regard to the drawings,

- a. the figure of the **drawings** to be published with the abstract is Figure No. 3

☒ as suggested by the applicant.

☐ as selected by this Authority, because the applicant failed to suggest a figure.

☐ as selected by this Authority, because this figure better characterizes the invention.

- b. ☐ none of the figures is to be published with the abstract.

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Intern application No
PCT, 2004/038250

A. CLASSIFICATION OF SUBJECT MATTER IPC 7 F16C33/78 F16J15/34		
According to International Patent Classification (IPC) or to both national classification and IPC		
B. FIELDS SEARCHED Minimum documentation searched (classification system followed by classification symbols) IPC 7 F16C F16J B62D		
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched		
Electronic data base consulted during the International search (name of data base and, where practical, search terms used) EPO-Internal, WPI Data, PAJ		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 4 167 297 A (CHEESMAN ET AL) 11 September 1979 (1979-09-11) column 2, line 18 - column 6, line 28 -----	1,2,4, 6-10, 16-21, 24,25
X	EP 0 677 673 A (SNR ROULEMENTS) 18 October 1995 (1995-10-18) column 1, line 49 - column 2, line 39 -----	1-3,8, 11,18-20
X A	US 2 647 025 A (DEFFENBAUGH JOHN L) 28 July 1953 (1953-07-28) column 1, line 53 - column 4, line 5; figure 1 ----- -/--	1,2,5, 18,19 16,21, 24,25
<input checked="" type="checkbox"/> Further documents are listed in the continuation of box C. <input checked="" type="checkbox"/> Patent family members are listed in annex.		
* Special categories of cited documents : "A" document defining the general state of the art which is not considered to be of particular relevance "E" earlier document but published on or after the International filing date "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or other means "P" document published prior to the International filing date but later than the priority date claimed "T" later document published after the International filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art "&" document member of the same patent family		
Date of the actual completion of the International search		Date of mailing of the International search report
24 March 2005		05/04/2005
Name and mailing address of the ISA European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016		Authorized officer Axelsson, T

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2 275 307 A (MURDEN WILLIAM T) 3 March 1942 (1942-03-03) page 1, column 1, line 30 - page 2, column 1, line 39; figures 1,2 -----	1-3
X	EP 0 591 123 A (ATLAS COPCO TOOLS AB, NACKA; ATLAS COPCO TOOLS AB) 6 April 1994 (1994-04-06) column 1, line 36 - column 2, line 36; figure 1 -----	1,2
X	US 3 201 134 A (HAYATIAN ALLAN A) 17 August 1965 (1965-08-17) column 3, line 7 - column 6, line 44; figures -----	26-29
X	US 6 086 069 A (BEDFORD ET AL) 11 July 2000 (2000-07-11) column 2, line 3 - column 3, line 7; figures -----	26-28
A	FR 2 600 741 A (JADE SA) 31 December 1987 (1987-12-31) page Q; figures 1,2 -----	26,29

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